

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number
WO 2003/103595 A3

(51) International Patent Classification⁷: **C07K 1/00**,
14/00, 16/00, A01N 37/18, A61K 38/17, C07H 21/02,
21/04, C12Q 1/68, G01N 33/53

(21) International Application Number:
PCT/US2003/017937

(22) International Filing Date: 6 June 2003 (06.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/387,087 6 June 2002 (06.06.2002) US

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **UNIVERSITY OF ROCHESTER** [US/US]; 601 Elmwood Avenue, Box 706, Rochester, NY 14642 (US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): **CHANG, Chawn-shang** [US/US]; 19 Sandy Lane, Pittsford, NY 14534 (US).

(74) Agents: **SPRATT, Gwendolyn et al.**; Needle & Rosenberg, P.C., The Candler Building, 127 Peachtree Street, Atlanta, GA 30303-1811 (US).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
3 June 2004

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **ANDROGEN RECEPTOR COREGULATORS**

(57) Abstract: Disclosed are compositions and methods related to androgen receptor coregulators.



WO 2003/103595 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/17937

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07K 1/00, 14/00, 16/00; A01N 37/18; A61K 38/17; C07H 21/02, 21/04; C12Q 1/68; G01N 33/53
 US CL : 530/350, 402; 514/2, 12; 536/23.1, 23.5; 435/6, 7.1, 455; 424/9.2

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 530/350, 402; 514/2, 12; 536/23.1, 23.5; 435/6, 7.1, 455; 424/9.2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 MEDLINE, BIOSIS, CAPLUS, EMBASE, USPATFULL

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	KUMAR et al. Identification and characterization of a suppressor element in the 5'-flanking region of the mouse androgen receptor gene. Nucleic Acid Research. 1994, Vol. 22, No. 18, pps 3693-3698, see entire document.	1, 2, 4-6
Y		7, 9-19
X	TAKESHITA et al. Molecular cloning and properties of full-length putative thyroid hormone receptor coactivator. Endocrinology. 1996, Vol. 137, No. 8, pages 3594-3597, see entire document.	22, 29-31, 81-82
Y		23-28, 32-45
X	PESTONJAMASP et al. Supervillin (p205): A novel membrane-associated, F-actin-binding protein in the villin/galsolin superfamily. J. Cell Biology. 1997, Vol. 139, No. 5, pages 1255-1269, see entire document.	46, 52-54
Y		47-51, 55-68
X	US 5,985,608 A (LUNA et al) 16 November 1999(16.11.1999), see entire document.	46, 52-54
Y		47-51, 55-68
A	WO 99/23213 A1 (UNIVERSITY OF MASSACHUSETTS) 14 May 1999 (14.05.99), see entire document.	1-102



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

26 February 2004 (26.02.2004)

Date of mailing of the international search report

05 APR 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Olga N. Chernyshev

Telephone No. (703) 308-0196

INTERNATIONAL SEARCH REPORT

PCT/US03/17937

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KALKHOVEN et al. Isoforms of steroid receptor co-activator 1 differ in their ability to potentiate transcription by the oestrogen receptor. The EMBO Journal. 1998, Vol. 17, No.1, pages 232-243, see entire document.	1-102

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/17937

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claim Nos.: 8
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
Two "claim 8" are presented in the instant disclosure.
3. ☐ Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.